Fig. 1

ATGCTGCGTCGGCGGGGCAGCCCTGGCATGGGTGTGCATGTGGGTGCAGCCC
TGGGAGCACTGTGGTTCTGCCTCACAGGAGCCCTGGAGGTCCAGGTCCCTGA
AGACCCAGTGGTGGCACTGGTGGGCACCGATGCCACCCTGTGCTGCTCCTTCT
CCCCTGAGCCTGGCTTCAGCCTGGCACAGCTCAACCTCATCTGGCAGCTGAC
AGATACCAAACAGCTGGTGCACAGCTTTGCTGAGGGCCAGGACCAGGGCAG
CGCCTATGCCAACCGCACGGCCCTCTTCCCGGACCTGCTGGCACAGGGCAAC
GCATCCCTGAGGCTGCAGCGCGTGCGTGTGGCGGACGAGGGCAGCTTCACCT
GCTTCGTGAGCATCCGGGATTTCGGCAGCGCTGCCGTCAGCCTGCAGGTGGC
CGCTCCCTACTCGAAGCCCAGCATGACCCTGGAGCCCAACAAGGACCTGCGG
CCAGGGGACACGGTGACCATCACGTGCTCCAGCTACCGGGGCTACCCTGAGG
CTGAGGTGTTCTGGCAGGATGGGCAGGGTGTGCCCCTGACTGGCAACGTGAC
CACGTCGCAGATGGCCAACGAGCAGGGCTTGTTTGATGTGCACAGCGTCCTG
CGGGTGGTGCTGGGTGCGAATGGCACCTACAGCTGCCTGGTGCGCAACCCCG
TGCTGCAGCAGGATGCGCACGGCTCTGTCACCATCACAGGGCAGCCTATGAC
ATTCCCCCCAGAGGCCCTGTGGGTGACCGTGGGGCTGTCTGTCTGTCTCATTG
CACTGCTGGTGGCCCTGGCTTTCGTGTGCTGGAGAAAGATCAAACAGAGCTG
TGAGGAGGAGAATGCAGGAGCTGAGGACCAGGATGGGGAGGGAGAAGGCTC
CAAGACAGCCCTGCAGCCTCTGAAACACTCTGACAGCAAAGAAGATGATGG
ACAAGAAATAGCCTGA

Fig. 2

ATGCTGCGTCGGCGGGGCAGCCCTGGCATGGGTGTGCATGTGGGTGCAGCCC
TGGGAGCACTGTGGTTCTGCCTCACAGGAGCCCTGGAGGTCCAGGTCCCTGA
AGACCCAGTGGTGGCACTGGTGGGCACCGATGCCACCCTGTGCTGCTCCTTCT
CCCCTGAGCCTGGCTTCAGCCTGGCACAGCTCAACCTCATCTGGCAGCTGAC
AGATACCAAACAGCTGGTGCACAGCTTTGCTGAGGGCCAGGACCAGGGCAG
CGCCTATGCCAACCGCACGGCCCTCTTCCCGGACCTGCTGGCACAGGGCAAC
GCATCCCTGAGGCTGCAGCGCGTGCGTGTGGCGGACGAGGGCAGCTTCACCT
GCTTCGTGAGCATCCGGGATTTCGGCAGCGCTGCCGTCAGCCTGCAGGTGGC
CGCTCCCTACTCGAAGCCCAGCATGACCCTGGAGCCCAACAAGGACCTGCGG
CCAGGGGACACGGTGACCATCACGTGCCCCAGCTACCGGGGCTACCCTGAGG
CTGAGGTGTTCTGGCAGGATGGGCAGGGTGTGCCCCTGACTGGCAACGTGAC
CACGTCGCAGATGGCCAACGAGCAGGGCTTGTTTGATGTGCACAGCGTCCTG
CGGGTGGTGCTGGGTGCGAATGGCACCTACAGCTGCCTGGTGCGCAACCCCG
TGCTGCAGCAGGATGCGCACGGCTCTGTCACCATCACAGGGCAGCCTATGAC
ATTCCCCCCAGAGGCCCTGTGGGTGACCGTGGGGCTGTCTGTCTGTCTCATTG
CACTGCTGGTGGCCCTGGCTTTCGTGTGCTGGAGAAAGATCAAACAGAGCTG
TGAGGAGGAGAATGCAGGAGCTGAGGACCAGGATGGGGAGGGAGAAGGCTC
CAAGACAGCCCTGCAGCCTCTGAAACACTCTGACAGCAAAGAAGATGATGG
ACAAGAAATAGCCTGA

Fig. 3

MLRRRGSPGMGVHVGAALGALWFCLTGALEVQVPEDPVVALVGTDATLCCSFS
PEPGFSLAQLNLIWQLTDTKQLVHSFAEGQDQGSAYANRTALFPDLLAQGNASL
RLQRVRVADEGSFTCFVSIRDFGSAAVSLQVAAPYSKPSMTLEPNKDLRPGDTVT
ITCSSYRGYPEAEVFWQDGQGVPLTGNVTTSQMANEQGLFDVHSVLRVVLGAN
GTYSCLVRNPVLQQDAHGSVTITGQPMTFPPEALWVTVGLSVCLIALLVALAFV
CWRKIKQSCEEENAGAEDQDGEGEGSKTALQPLKHSDSKEDDGQEIA

Fig. 4

MLRRRGSPGMGVHVGAALGALWFCLTGALEVQVPEDPVVALVGTDATLCCSFS
PEPGFSLAQLNLIWQLTDTKQLVHSFAEGQDQGSAYANRTALFPDLLAQGNASL
RLQRVRVADEGSFTCFVSIRDFGSAAVSLQVAAPYSKPSMTLEPNKDLRPGDTVT
ITCPSYRGYPEAEVFWQDGQGVPLTGNVTTSQMANEQGLFDVHSVLRVVLGAN
GTYSCLVRNPVLQQDAHGSVTITGQPMTFPPEALWVTVGLSVCLIALLVALAFV
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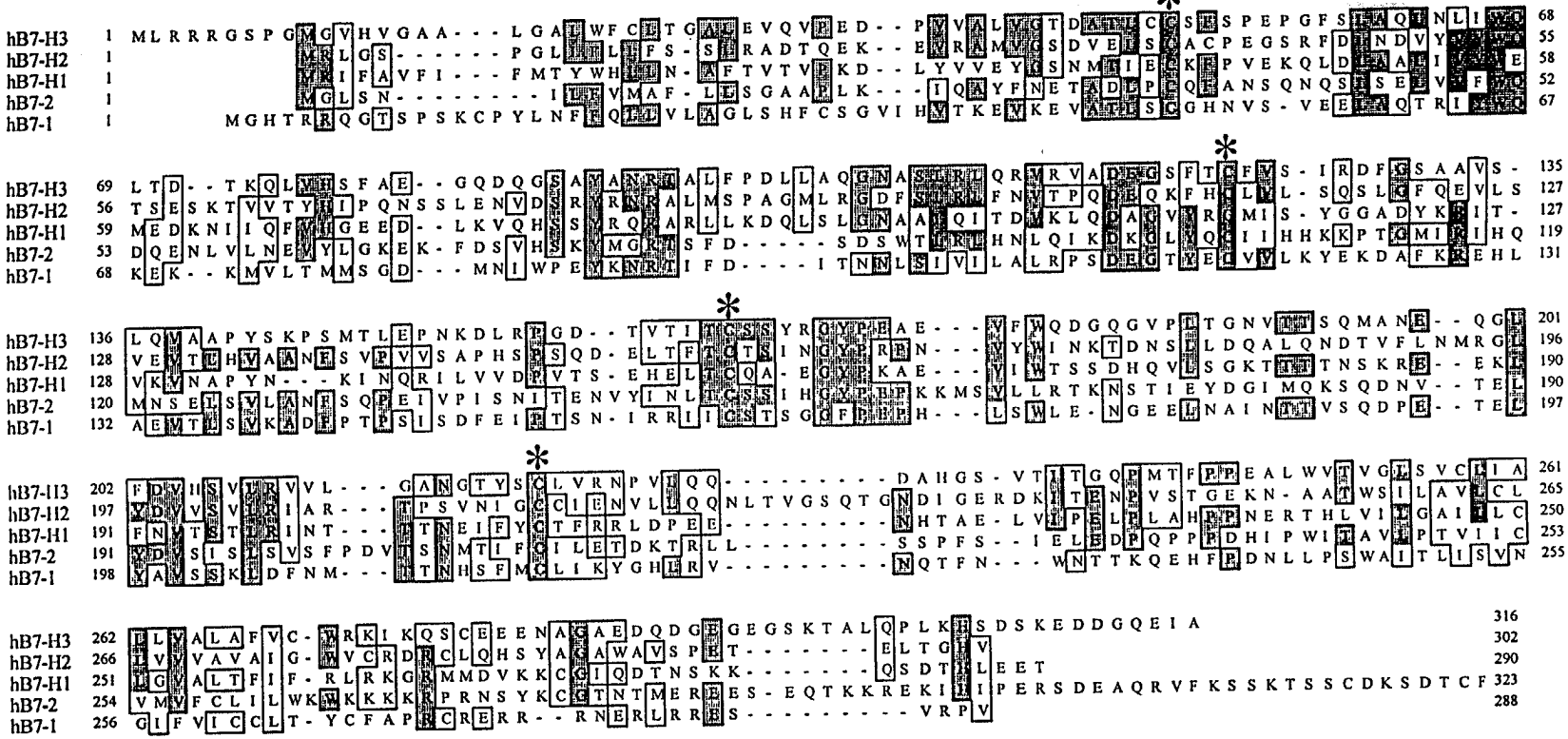
Fig. 5A



signal peptide ..... *IgV-like domain* .....

MLRRRGSPGMGVHVGAALGALWFCLTGALEVQVPEDPVVALVGTDATLCCSFSPEPGFSLAQLNLIWQLTDTKQLVHSFAEGQDQGSAY

.....

ANRTALFPDLLAQGNASLRLQRVRVADEGSFTCFVSIRDFGSAAVSLQVAAPYSKPSMTLEPNKDLRPGDTVTITCSSYRGYPEAEVFW

IgC-like domain *TM*

QDGQGVPLTGNVTTSQMANEQGLFDVHSVLRVVLGANGTYSCLVRNPVLQQDAHGSVTITGQPMTFPPEALWVTVGLSVCLIALLVALA

IC

.....

FVCWRKIKQSCEEENAGAEDQDGEGEGSKTALQPLKHSDSKEDDGQEIA

Fig. 5B

Fig. 6A

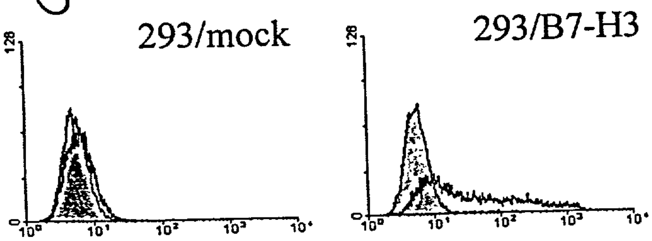

293/mock
293/B7-H3

Fig. 6B

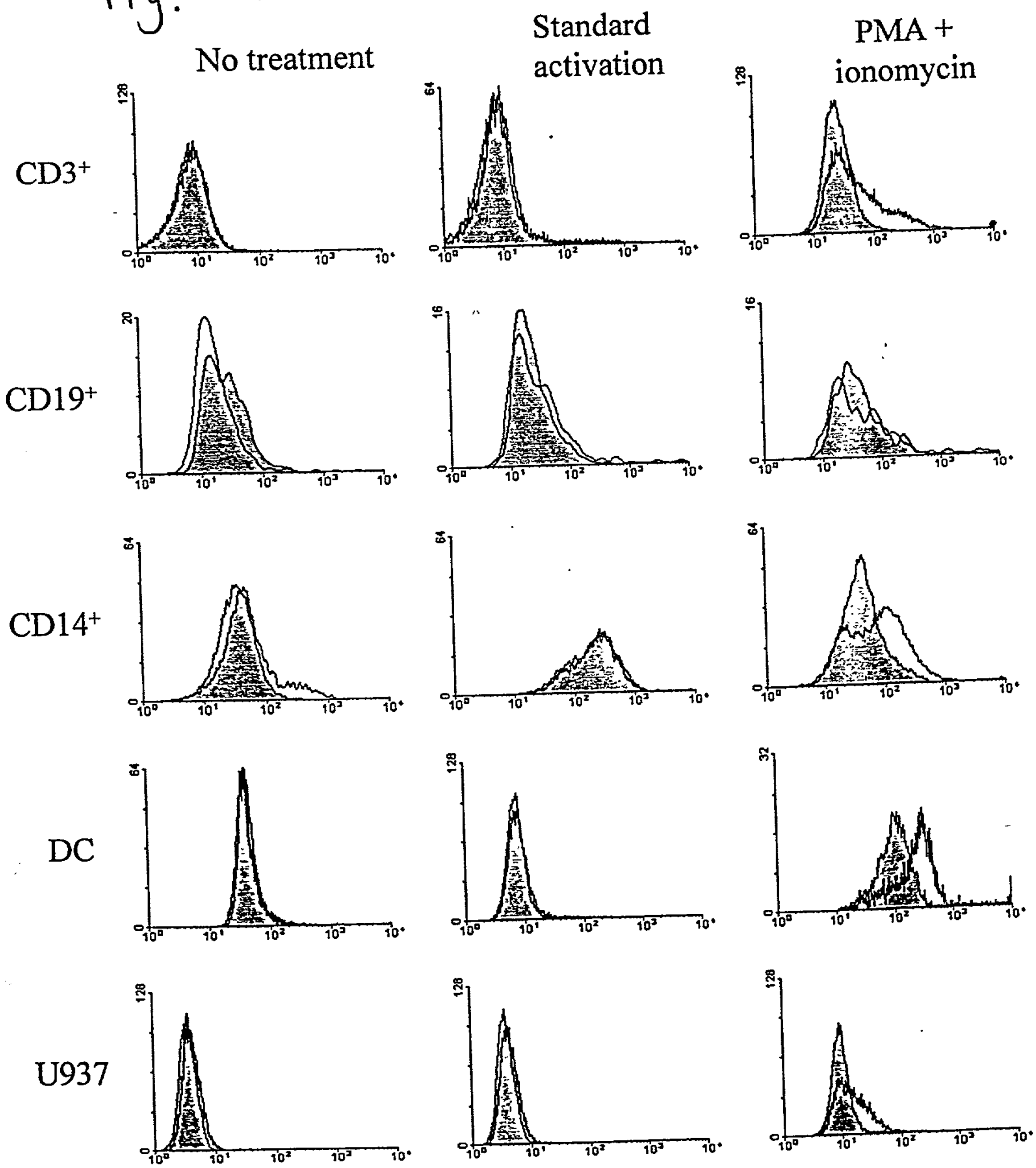
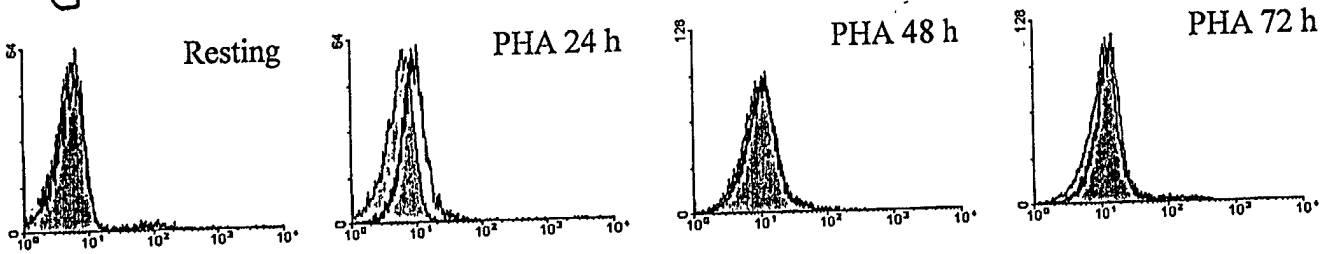

No treatment
Standard activation
PMA + ionomycin
CD3+
CD19+
CD14+
DC
U937

Fig. 7A



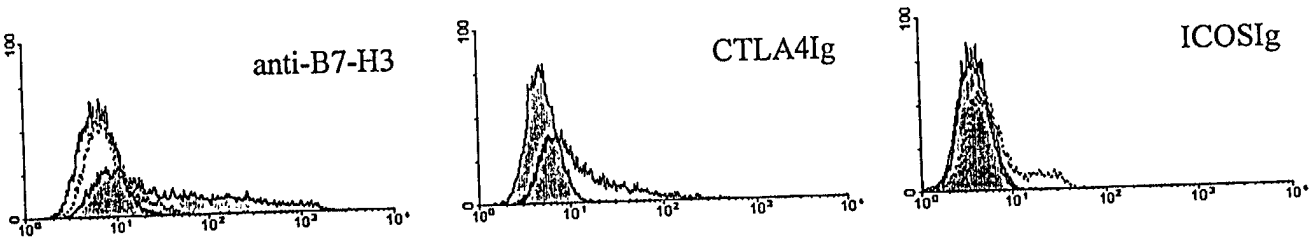


Fig 7B

Fig. 8A

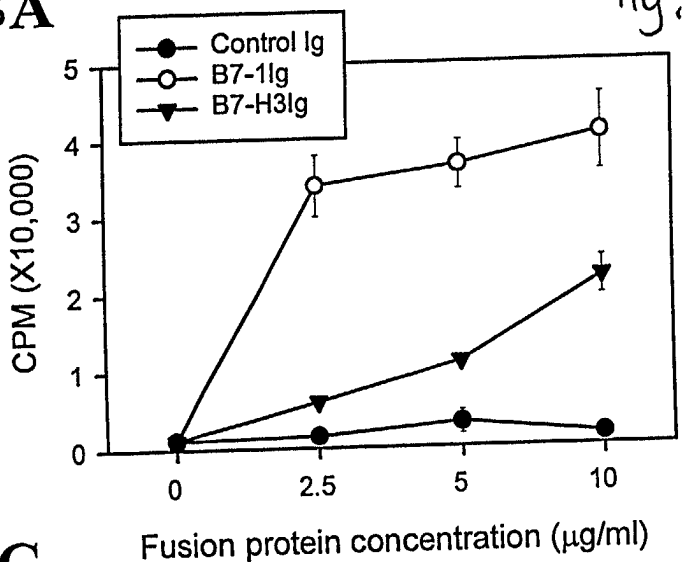


Fig. 8B

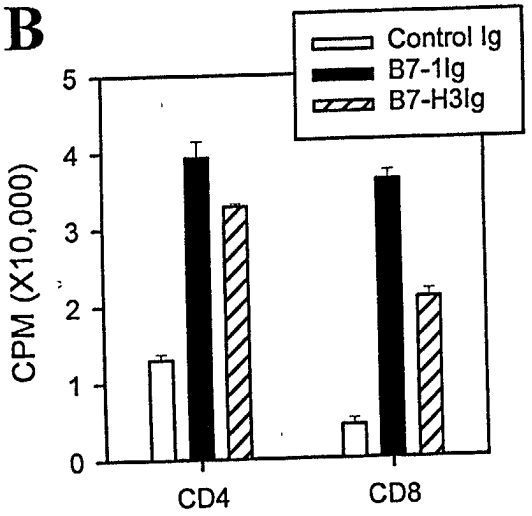


Fig. 8C

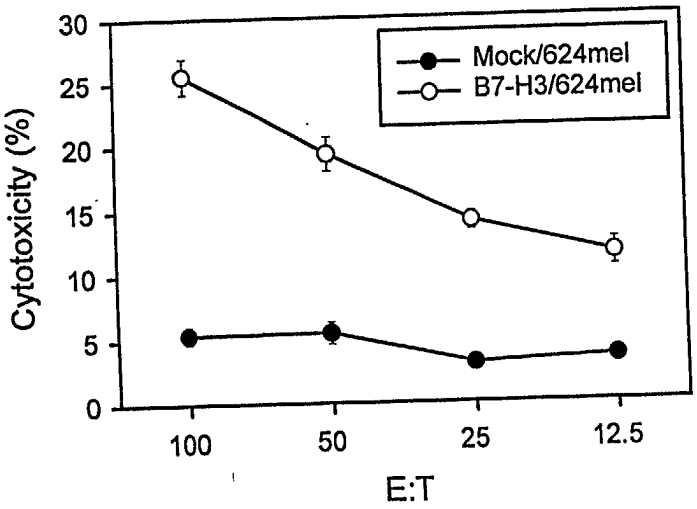


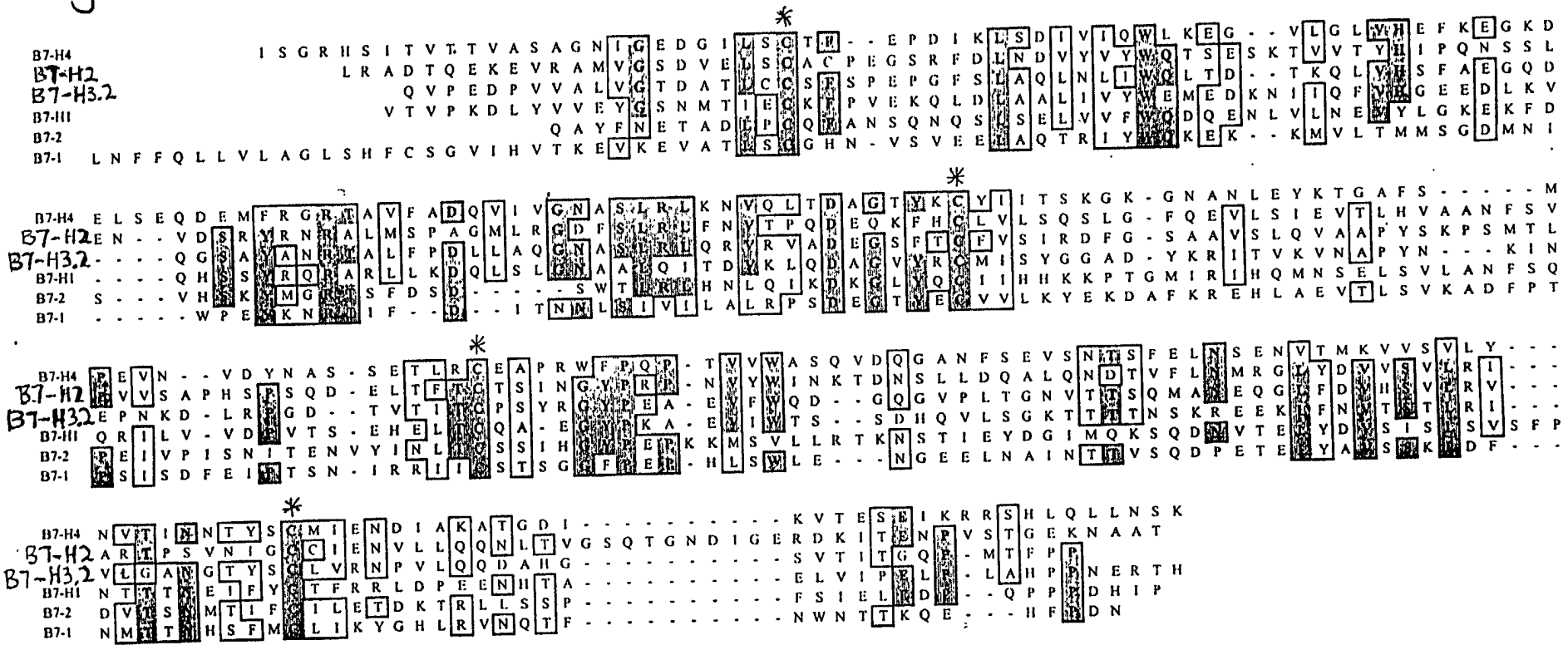
Fig. 9

ATGGCTTCCCTGGGGCAGATCCTCTTCTGGAGCATAATTAGCATCATCATTAT
TCTGGCTGGAGCAATTGCACTCATCATTGGCTTTGGTATTTCAGGGAGACACT
CCATCACAGTCACTACTGTCGCCTCAGCTGGGAACATTGGGGAGGATGGAAT
CCTGAGCTGCACTTTTGAACCTGACATCAAACTTTCTGATATCGTGATACAAT
GGCTGAAGGAAGGTGTTTTAGGCTTGGTCCATGAGTTCAAAGAAGGCAAAGA
TGAGCTGTCGGAGCAGGATGAAATGTTCAGAGGCCGGACAGCAGTGTTTGCT
GATCAAGTGATAGTTGGCAATGCCTCTTTGCGGCTGAAAAACGTGCAACTCA
CAGATGCTGGCACCTACAAATGTTATATCATCACTTCTAAAGGCAAGGGGAA
TGCTAACCTTGAGTATAAAACTGGAGCCTTCAGCATGCCGGAAGTGAATGTG
GACTATAATGCCAGCTCAGAGACCTTGCGGTGTGAGGCTCCCCGATGGTTCC
CCCAGCCCACAGTGGTCTGGGCATCCCAAGTTGACCAGGGAGCCAACTTCTC
GGAAGTCTCCAATACCAGCTTTGAGCTGAACTCTGAGAATGTGACCATGAAG
GTTGTGTCTGTGCTCTACAATGTTACGATCAACAACACATACTCCTGTATGAT
TGAAAATGACATTGCCAAAGCAACAGGGGATATCAAAGTGACAGAATCGGA
GATCAAAAGGCGGAGTCACCTACAGCTGCTAAACTCAAAGGCTTCTCTGTGT
GTCTCTTCTTTCTTTGCCATCAGCTGGGCACTTCTGCCTCTCAGCCCTTACCT
GATGCTAAAATAA

Fig. 10

MASLGQILFWSIISIIIILAGAIALIIGFGISGRHSITVTTVASAGNIGEDGILSCTFEPD
IKLSDIVIQWLKEGVLGLVHEFKEGKDELSEQDEMFRGRTAVFADQVIVGNASLR
LKNVQLTDAGTYKCYIITSKGKGNANLEYKTGAFSMPEVNVDYNASSETLRCEA
PRWFPQPTVVWASQVDQGANFSEVSNTSFELNSENVTMKVVSVLYNVTINNTYS
CMIENDIAKATGDIKVTESEIKRRSHLQLLNSKASLCVSSFFAISWALLPLSPYLM
LK

Fig. 11



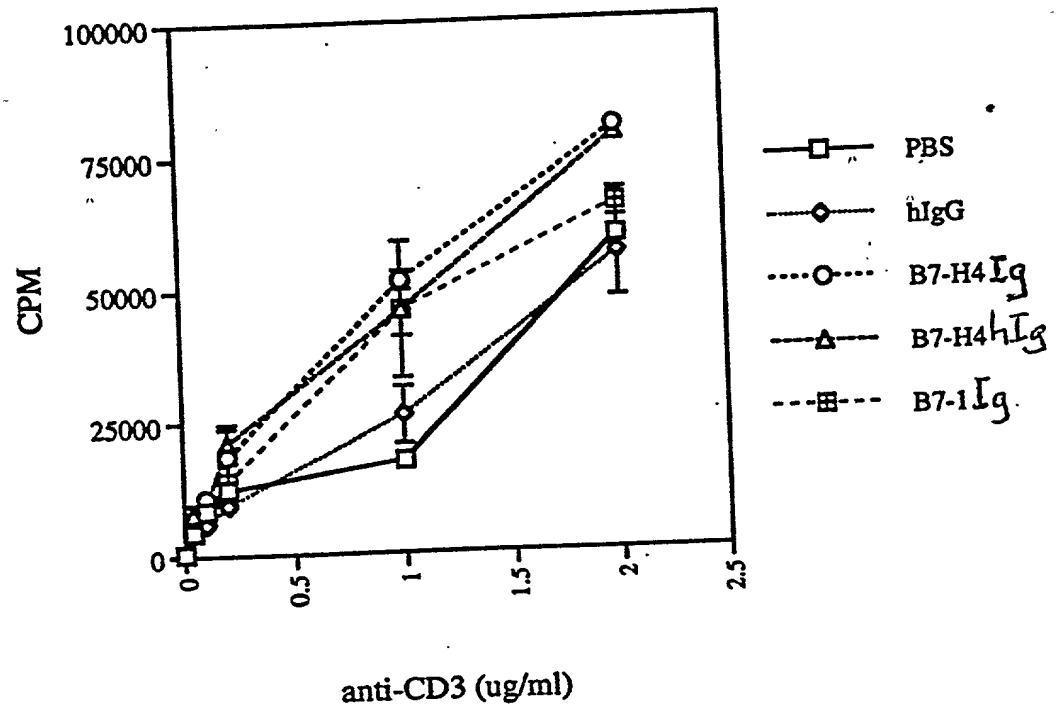


FIG. 12

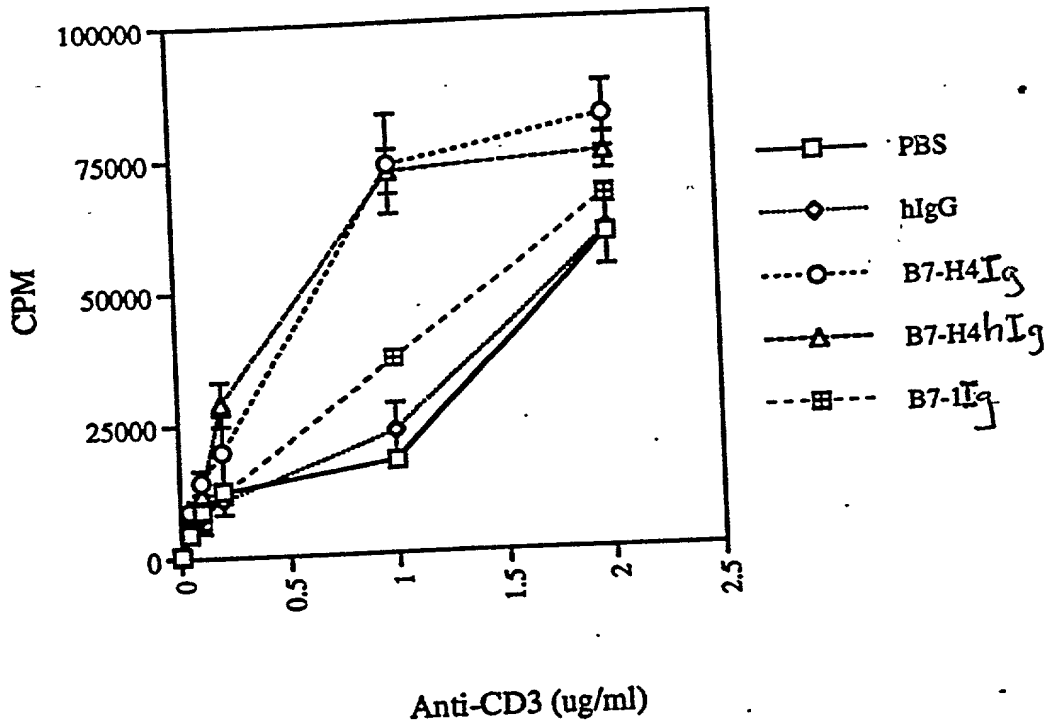
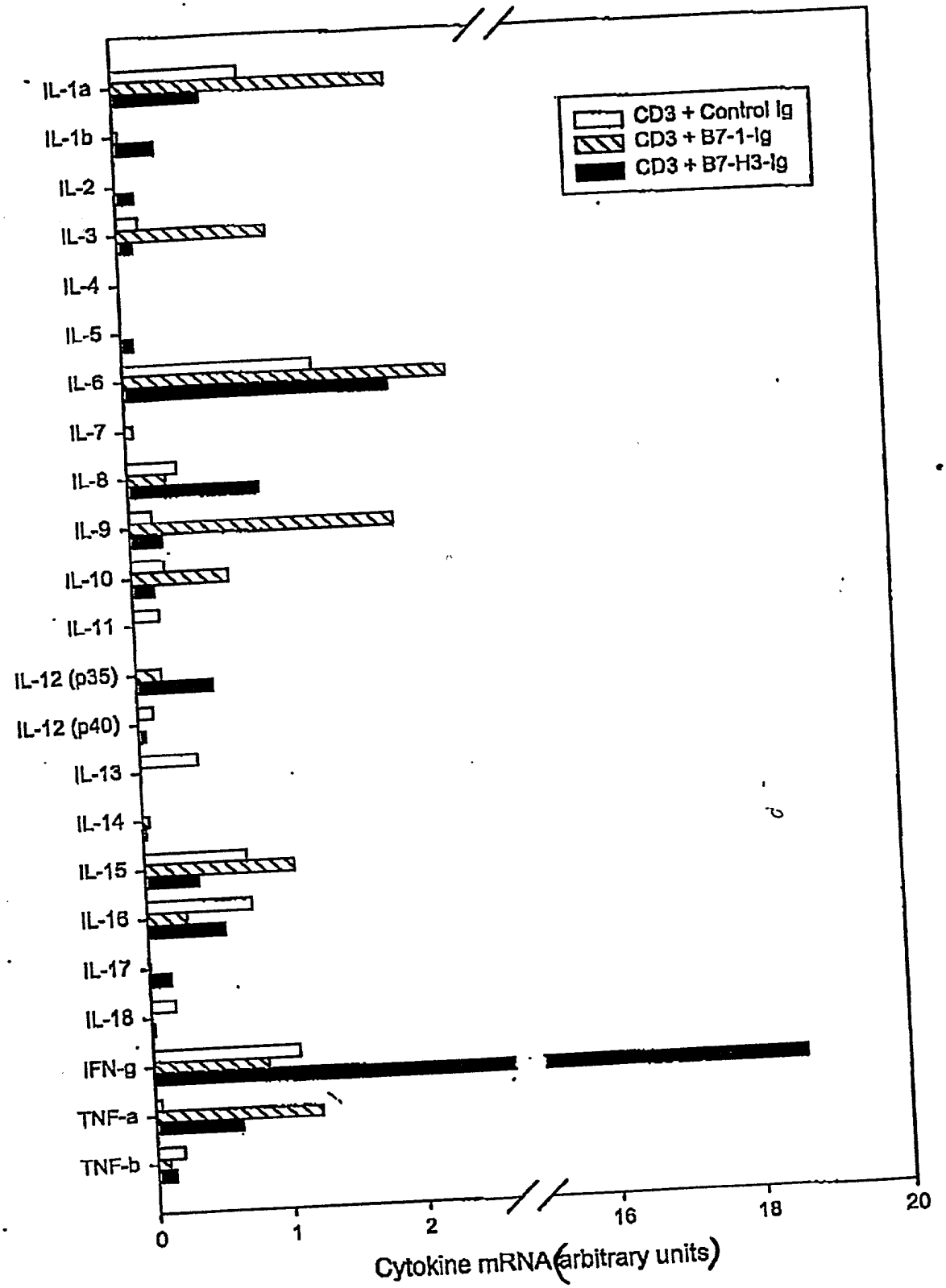


FIG. 13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IL-1b
IL-2
IL-3
IL-4
IL-5
IL-6
IL-7
IL-8
IL-9
IL-10
IL-11
IL-12 (p35)
IL-12 (p40)
IL-13
IL-14
IL-15
IL-16
IL-17
IL-18
IFN-g
TNF-a
TNF-b
CD3 + Control Ig
CD3 + B7-1-Ig
CD3 + B7-H3-Ig
0
1
2
16
18
20
Cytokine mRNA (arbitrary units)

Fig. 14